

MUNK-WEINERT, M.

✓ Effect of mercury ion on yeast fermentation in acid solutions of potassium ferrocyanide. T. Pinter and M. Munk-Weinert (Fac. Med., Zagreb, Yugoslavia). *Farm. Chim.* 19, 120-80 (1964). —Various toxic effects of HCl, H₂SO₄, HNO₃, and HClO₄ on yeast fermentation have been demonstrated. In low concns, the effect of these acids is almost of the same degree. Toxicity rapidly increases in higher concns. of HClO₄. The toxic effects of HgCl₂, Hg(CN)₂, Hg(NO₃)₂, and Hg(ClO₄)₂ were examd. The toxicity of Hg(CN)₂ is considerably lower than that of HgCl₂. According to previous statements on catalytic action of acid K₄[Fe(CN)₆] salts, it has been proved that K₄[Fe(CN)₆] alone as well as in mixts. with various Hg salts stimulates the fermentation of yeast. T. Pinter

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VUGO:

The sphingoside series. III. Preparation of sphingine by the catalytic reduction of tribenzoylsphingosine. M. Munk-Weinert, D. E. Sunko, and M. Proštenik (Univ. Zagreb, Yugoslavia). *J. Org. Chem.* 19, 378-80 (1954); *J. C. S. 49, 1736.* Tribenzoylsphingosine (1.1 g.), m. 118-20°, is hydrogenated in 90 cc. EtOH with 200 mg. Adams PtO₂ catalyst 3 hr. at 24° and atm. pressure; the filtered soln. is evapd: *in vacuo* to dryness, the residue taken up in ether, and the washed (NaHCO₃, H₂O) ether soln. evapd., giving 72.4% *O,N-dibenzoylsphingine* (I), m. 90-1°, [α]_D 21.36 (c 2.328, CHCl₃). From the aq. washings (a) 9 21.36 (c 2.328, CHCl₃). From the aq. washings similarly 90 mg. II with 10% H₂SO₄-MeOH gives 97% III, m. 86-7°, [α]_D -5.1° (c 3.14, CHCl₃). F. E. B.

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MUNK-WEINERT, M.

YUGO. Synthesis of optically active 2-aminooctadecane. M. Munk-Weinert and M. Prošenik (Univ. Zagreb, Yugoslavia) (J. Am. Chem. Soc. 76, 80-83 (1954) (in English). To a soln. of $\text{AcCH}_2\text{NaCO}_2\text{Et}$ (from 5.18 g. Na, 100 ml. EtOH and 55 ml. $\text{AcCH}_2\text{CO}_2\text{Et}$) 65.35 g. CuHgBr was added, the mixt. refluxed 6 hrs., 60 g. KOH in 60 ml. H_2O added, the mixt. kept 30 min. at 50° with shaking, refluxed 2 hrs. with 400 ml. 5*N* HCl, extd. with Et_2O , washed with 5% KOH and H_2O , dried, evapd., and the residue cryst. twice from EtOH to give 33.2 g. (55%) CuHgAc (I), m. 63° ; 2,4-dinitrophenylhydrazone, m. 92° (from EtOH); oxime (II), m. $67-9^\circ$ (from EtOH). A soln. of 2.09 g. I and 6 ml. PhCH_2NH_2 in 25 ml. EtOH was hydrogenated 3.5 hrs. over PtO_2 (from 45 mg. PtO_2) to give 3.21 g. (90.0%) *dl*-2-benzylamino-octadecane (III), b. $205-5^\circ$; neutral oximate, m. $131-3^\circ$ (from abs. EtOH). II (5 g.) in 100 ml. anhyd. Et_2O was dropped into a soln. of 1.4 g. LiAlH₄ in 75 ml. anhyd. Et_2O , refluxed 1 hr., theoretical amt. of II (5 g.) added, Et_2O layer dried and evapd. to leave 4.84 g. crude *dl*-2-aminooctadecane (IV), m. $45-65^\circ$. The same compd., b. $135-7^\circ$, m. $65-76^\circ$ [oxalate, m. $150-2^\circ$ (from abs. Et_2O)], *d*-tartrate, m. $125-8^\circ$ (from EtOH); *d*-benzoyl-*L*-tartrate, m. $160-2^\circ$ (from abs. EtOH)], was precip. (93.7% yield) by reduction of 3 g. III in 25 ml. EtOH over 1 g. Pd-BaSO₄ catalyst in 3 hrs. at room temp. and pressure. A mixt. of 0.23 g. IV, 1 ml. Ac_2O , and 1 ml. $\text{C}_6\text{H}_5\text{N}$ heated 0.5 hr. at 100° gave 0.21 g. *dl*-2-acetoamidoctadecane (V), m. 82° (from EtOH). To a soln. of 18 g. III in 40 ml. Me_2CO 0.0 g. *L*-benzylidauine (VI) was added, heated on a steam bath, let stand overnight, septi. crystals filtered off (13.5 g. or 6.7%) and cryst. twice from 50 ml. Me_2CO to give 8.84 g. (61%) VI salt (VII), m. 80° , $[\alpha]_D^{25} 22.6^\circ$ (c 3.5, EtOH).

mother liquids from VII were evapd., residue dissolved in Et₂O, washed with 2*N* Na₂CO₃ and H₂O, residue (8.06 g., oil) dissolved in 25 ml. Me₂CO, 4.812 g. n-VI added and the sep'd. crystals crystd. twice from 35 ml. Me₂CO to give 8.03 g. (64.7%) (−)-VII, m. 80°, [α]_D²⁵ −22.0° (c 2.5, EtOH). A soln. of 5.98 g. (+)-VII in Et₂O was mixed with 2*N* Na₂CO₃, the Et₂O layer washed with H₂O, dried, evapd. and the residue distd. *in vacuo* to give 3.59 g. (−)-2-benzylamino-octane (VIII), b.p., 153–6°, [α]_D²⁵ −8.95°, d₄²⁰ 0.8990. By catalytic debenzylation of 2.59 g. VIII in the same manner as described for III, 1.04 g. (−)-IV, b.p., 132–3°, [α]_D²⁵ −2.82° (c 4.58, CHCl₃) was obtained. (−)-IV, 0.54 g., gave 0.58 g. (+)-V, m. 90–1°, [α]_D²⁵ 4.34° (c 4.84, CHCl₃). From 0.135 g. (−)-IV and 0.074 g. o-C₆H₄(CO)₂O, heated 1 hr. at 140°, 0.105 g. (−)-2-phthalimidooctane (IX) was obtained, m. 61–2°, [α]_D²⁵ −11.07° (c 2.8, CHCl₃). Analogously: (+)-III (4.48 g. from 7.23 g. (−)-VIII, b.p., 153–6°, [α]_D²⁵ 8.24°; (+)-IV, b.p., 132–4°, [α]_D²⁵ 2.80° (c 5, CHCl₃); (−)-V, m. 90–1° (from EtOH), [α]_D²⁵ −4.75° (c 4.84, CHCl₃); (+)-IX, m. 61–2° (from EtOH), [α]_D²⁵ 10.07° (c 3, CHCl₃). E. Gutak

MUNK-WERNERT, M.

✓ The sphingolipid series. IV. Determination of the configuration of the amino carbon atom in sphingosine
M. Prucknik, M. Munk-Weinert, and D. E. Sanké (Univ.
Zagreb, Yugoslavia) *J. Am. Chem. Soc.*, 71, 100-111 (1949).
C.A. 49, 6280f; 50, 11984c. — The configuration of the C
 atom carrying the NH₂ group in sphingosine (I) has been
 deduced by a direct chem. method. Benzylation of (-)-
 sphingine according to Carter and Humiston (C.A. 46,
 1975e) gives (+)-N-benzoylsphingine (II), m. 112-14°,
 $[\alpha]_D^{25} 21.9^\circ$ (c 2, CHCl₃). Refluxing 1 g. II in 7 cc.
 Et₂O with 10 cc. SOCl₂ 3 hrs. and evapg. the mixt. in
 vacuo give 0.6 g. (+)-1-chloro-2-benzylaminodecane (III),
 needles, m. 101-2°, $[\alpha]_D^{25} 22.57^\circ$ (c 2.83, all rotations
 in CHCl₃). Adding slowly 560 mg. III in 50 cc. Et₂O to 0.3
 g. LiAlH₄ in 50 cc. Et₂O, refluxing the mixt. 4 hrs., decomposing
 the excess LiAlH₄ with H₂O, and evapg. the Et₂O soln. give
 410 mg. (+)-2-benzylaminodecane (IV), b. 130-46°
 (bath temp. (b.t.) *in vacuo*). Keeping 180 mg. IV and 98
 mg. benzyl-n-sulfide (V) in 1 cc. Me₂CO overnight at 0°
 gives 84 mg. V salt of IV, needles, m. 90°, $[\alpha]_D^{25} -21.9^\circ$
 $(c$ 2.5, 96% Et₂O). Catalytic reduction of 550 mg. IV in 15
 cc. 90% EtOH with 180 mg. 10% Pt-Ba catalyst at 10°
 pressure of H₂ gives 375 mg. (+)-2-acetylaminodecane VI,
 b. 80-100°, $[\alpha]_D^{25} -4.0^\circ$ (c 2.61). Heating 237 mg. VI and 130 mg. of
 $C_6H_5(CO)_2O$ 1 hr. at 140° gives 126 mg. (+)-2-phthaloyl-
 aminodecane (VII), plates, m. 100-1, $[\alpha]_D^{25} 10.63^\circ$ (c
 3.02), which (160 mg.) hydrogenated in 20 cc. 90% EtOH
 in the presence of 100 mg. Adams catalyst at 20° and 74
 mm. 3 hrs., gives 160 mg. (+)-4-hexahydrophthaloylamino-
 octadecane (VIII), needles, m. 44-5°, $[\alpha]_D^{25} 3.31^\circ$ (c 3.1). Adding dropwise with stirring 32 g. phthaloyl-p-alanyl

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Prostenik, M; Munk-Werntz, m...

chloride in 150 cc. C_6H_6 to $\text{Cu}(\text{II})\text{CN}(\text{CO}_2\text{Et})_3$ (from 46 g. ester) in 150 cc. C_6H_6 below 35° , stirring the mixt. 7 hrs., heating 10 min. on a steam bath, adding 10 cc. H_2O , refluxing 2 hrs., adding 250 cc. H_2O , evapg. the washed C_6H_6 soln., and re-crystg. the residue from petr. ether give 8.5 g. phthaloyl- α -aminine. Evapg. the mother-liquor and re-crystg. the residue from 90% EtOH give 14.8 g. ($-$) ω -phthaloyl- α -aminooctadecanoic (IX), needles, m. 78.0° . $[\alpha]_D^{25} -3.2^\circ$ (c 5), -3.1° (c 10) (oxime, m. 42.5°). Satz. a suspension of 815 mg. IX in 20 cc. CHCl_3 and 3.5 cc. $(\text{CH}_3)_2\text{S}$ with dry HCl at $0-5^\circ$, keeping the mixt. 46 hr. in a refrigerator, adding Et_2O , evapg. the washed $(\text{NaHCO}_3, \text{H}_2\text{O}, 2N \text{HCl}, \text{H}_2\text{O})$ and dried Et_2O soln. in vacuo, and refluxing the residue (750 mg.) in 50 cc. EtOH 7 hrs. with freshly prep'd. Raney Ni in 10 cc. EtOH give VIII, needles, m. $43-4^\circ$. $[\alpha]_D^{25} 5.60^\circ$ (c 3.04). Heating VIII 10 min. with 17% KOH on a steam bath and acidifying the soln. with dil. HCl give 2-(ω -carboxyhexahydrobenzylamino)octadecene, m. $77-80^\circ$. On the basis of these results the ν -configuration has been assigned to the C atom 2 in I, they also show that natural I has the structure *trans* ethyl- ω -1,3-dihydroxy- β -amino-octadecene.

R. E. Branson

M FRK

PROSTENIK, M.; MAJHOFER-ORESCANIN, B.; MUNK-WEINERT, M.; RIES-LESIC, B.

Studies in the sphingolipide series. XII. Structure of the cerebrin
anhydro base of yeast (C_{20} - phytosphingosine anhydro base). Croat
chem acta 32 no.1:11-15 '60. (EEAI 9:12)

1. Department of Biochemistry, Institute "Ruder Boskovic," and Department
of Chemistry, Medical Faculty, University of Zagreb, Zagreb, Croatia,
Yugoslavia.

(Sphingolipides) (Cerebrin) (Yeast)
(Phytosphingosine)

MUNK-WEINERT, M.; PROSTENIK, M.

Studies in the sphingolipid series. XVIII. Synthesis and resolution
of 1-hydroxy-2-aminoeicosane (C₂₀-sphingine). Croat chem acta 32 no.4:
197-202 '60. (EEAI 10:9)

1. Department of Chemistry, Medical Faculty, University of Zagreb,
Croatia, Yugoslavia.

(Sphingine) (Sphingolipides) (Eicosanedioic acid)

PROSTENIK, M.; KISIC, A.; MAJHOFER-ORESCANIN, B.; MUNK-WEINERT, M.
JELUSIC, S.

Occurrence of C₂₀-sphingolipide bases in animal and plant tissue.
Bul sci Yugosl 7 no 41/2:1 F-Apr '62.

L. Zavod za kemiju Medicinskog fakulteta, i Biokemijski odjel
Instituta "Ruder Boskovic," Zagreb.

*

PROSTENIK, M.; STANACEV, N.Z.; MUNK-WEINERT, M.

Identification of normal higher aliphatic aldehydes by means
of the melting point data of their thiosemicarbazones. Croat
chem acta 34 no.1:1-6 '62.

1. Department of Chemistry, Faculty of Medicine, University
of Zagreb, Zagreb, Croatia, Yugoslavia.

Fluake, H.

ZATHURECKY, L.; MUNKA, A.

Possible use of salicylamide in powder compounds. Cas. cesk lek.
63 no.20:241-245 31 Oct 50. (CLML 20:4)

1. Of the Institute of Galenic Pharmacy, Slovak University,
Bratislava.

MUNKA, V.

CZECHOSLOVAKIA/Morphology of Man and Animals. Lymphatic and R. E.
Systems.

S-3

Abs Jour: Referat. Zh.-Biol., No 1, 10 January, 1958, 2864.

Author : Munka, V.

Inst :

Title : Lymph Drainage of Pulmonary Lobes.

Orig Pub: Ceskoslov. morfol., 1956, 4, No 3, 196-204.

Abstract: It was determined by studying with injection techniques 40 fetuses of various ages and 10 cadavers, that lymph from the lung drained into the following groups of nodes: from the right upper lobe - bronchial, left and right tracheobronchial, nodes of the bifurcation, and right anterior mediastinal; from the middle lobe - bronchial, nodes of the bifurcation, right tracheobronchial, right anterior mediastinal, paraesophageal, and right supravacular; from the dorsal apical and ventral segments of the left lung - bracheal, nodes of the bifurcation, left tracheobrachial,

Card : 1/2

-1-

MUNKA, V.; GREGOR, A.; KNAZOVSKY, M.

Branching of the right pulmonary artery of cats studies on corrosion specimens. Cesk. morf. 10 no. 3:317-328 '62.

1. From the Institute of Normal Anatomy, Faculty of Medicine of P. J. Safarik's University in Kosice, head Doc. Dr. V. Munka, C.Sc. (PULMONARY ARTERY anat & histol)

MUNKA, Vladimir

Contribution to the technic of filling of the lymphatic vessels.
Cesk. morf. 10 no.4:445-447 '62.

1. Ustav pre normalnu anatomiu LF UPJS v Kosiciach, prednosta: Doc.
Dr. V. Munka C.Sc.
(LYMPH NODES) (SYRINGES)

MUNKA, V.; GREGOR, A.; KNAZOVICKY, M.

Branching of the left pulmonary artery of cats studied on corrosion specimens. Cesk. morf. 11 no.2:117-123 '63.

1. From the Institute of Normal Anatomy, Faculty of Medicine of the P.J. Safarik's University in Kosice, head: doc. dr. V. Munka, CSc.
(PULMONARY ARTERY) (ANATOMY)

GREGOR, A.; MUNKA, V.

The left pulmonary veins of cats studied on corrosion specimens.
Cesk. morf. 13 no. 1:51-56 '65

1. Institute of Anatomy, Faculty of Medicine, P.J.Safarik's
University, Kosice.

MUNKA, V.; GREGOR, A.

Lymphatics and bone marrow. Folia morph. (Praga) 13 no.4:
404-412 '65.

1. Institute of Anatomy, Faculty of Medicine of P.J. Safarik's
University in Kosice, Czechoslovakia. Submitted December 1, 1964.

MUNKACSI, F.

Isoserologic studies on ducks. In English, p. 161

ACTA BIOLOGICA. Budpaest Hungary, Vol. 10, No. 1, 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 9, No. 2, Feb. 1960
Uncl.

MUNKACSI, Ferenc (Godollo, Nyisztor ter 3, Ungarn)

Correlation between the age of horses and changes in the fractions
of their serum proteins. Acta biol Hung 11 no.3:231-239 '60.
(EEAI 10:4)

1. Tiergenetische Forschungsgruppe der Ungarischen Akademie der
Wissenschaften, Godollo (Vorstand: Gy.Fabian)
(HORSES)
(SERUM PROTEIN)

HALZL, Jozsef; MUNKACSY, Gyula

Other sources of power; their investigation and actual utilization. Energia es atom 1/4 no.4/5:195-202 My '61.

1. MOTERV.

DONATH, T.,; MUNKACSI, I.

Morphology of blood supply of the gasserian (semilunar) ganglion.
Acta morph. hung. 5 no.3-4:275-289 1955.

1. Institut fur Anatomie der Medizinischen Universitat, Budapest
(Direktor: Prof. F. Kiss)

Tibor Donath, Budapest, IX., Tuzolto-u 58. Ungarn.

Istvan Munkacsi, Budapest, IX., Tumolto-u 58. Ungarn.

(NERVES, TRIGEMINAL, blood supply,
gasserian ganglion)

MUNKACSI, Istvan

MUNKACSI, Istvan

Polyvinylchloride (P.V.C.) and piacryl plastics in corrosion technics.
Kiserletes orvostud. 9 no.3:328-331 July 57.

1. Budapesti Orvostudomanyi Egyetem Anatomiai Intesetenek koslemenye.
(BLOOD VESSELS, anat. & histol.
corrosion technic in making anat. prep. polyvinylchloride
& piacryl as filling materials (Hun))
(VINYL COMPOUNDS
polyvinylchloride as filling material for anat. prep. of
blood vessels by corrosion technic (Hun))
(ACRYLATES
piacryl as filling material for anat. prep. of blood
vessels by corrosion technic (Hun))

GOMORI, Pal; MUNKACSI, Istvan; NAGY, Zoltan; TAKACS, Lajos; KALLAY, Kalman;
Technikai munkatarsak: VAJDA, Vera; CSAPO, Istvan; TAKACS, Lajos

Significance of the arteriovenous anastomoses of the kidney in
haemorrhagic hypotonia in traumatic and ischemic shock, and in
arterial hypoxia. Biol orv kozl MTA 11 no.1:41-60. (EEAI 10:1)

1. L. tab, Magyar Tudomanyos Akademia (for Gomori) . 2. A Budapesti
Orvostudomanyi Egyetem II. sz. Belklinikaja es Anatomiai Intezete.
(KIDNEYS) (ARTERIES)

GOMORI, Pal, 1.tag.; MUNKACSI, Istvan; SZALAI, Elemer; TU SUJ-HAJ

Possibilities of intrarenal circulation in the case of the destruction
in great proportion of glomeruli in chronic renal deficiency. Biol
orv kozl MTA 11 no.4:375-381 '60. (EEAI 10:5)

1. Budapesti Orvostudomanyi Egyetem II. sz. Balklinika Anatomiai
Intezete es I. sz Kordonctani es Rakkutato Intezete. 2. Magyar
Tudomanyos Akademia (for Gomori).
(KIDNEY'S)

MUNKACSI, I.; SIKLOS, I.

Blood supply of the common bile duct. Acta Morph. Acad. Sci. Hung. 11
no.2:179-188 '62.

1. Department of Anatomy (Director: F. Kiss) and Second Department of
Surgery (Director: P. Rubanyi), University Medical School, Budapest.

(BILE DUCTS blood supply)

GOMORI, P.; MUNKACSI, I.; SZALAY, E.; TU SAJ-HAJ; ZOLNAI, B.

Intrarenal blood circulation in chronic renal failure. I. Human material. Acta med. acad. sci. hung. 13 no.4:441-449 '62.

1. Second Department of Medicine (Director Prof. P. Gomori), Institute of Anatomy (Director in Charge Doc. T. Donath) and the First Institute of Pathological Anatomy and Experimental Cancer Research (Director Prof. J. Balo), University Medical School, Budapest.
(KIDNEY DISEASES) (RENAL ARTERY) (RENAL VEINS)

GOMORI, P.; MUNKACSI, S.; NAGY, Z.; TAKACS, L.; KALLAY, K.

Ischaemia and arteriovenous anastomoses of the kidney in shock,
haemorrhage, dehydration and arterial hypoxia in dogs. Acta med. acad.
sci. Hung. 18 no.1:119-125 '62.

1. Second Department of Medicine (Director prof. P. Gomori) and Insti-
tute of Anatomy (Director prof. F. Kiss), University Medical School,
Budapest.

(KIDNEYS blood supply) (HEMORRHAGE exper)
(DEHYDRATION exper) (ANOXIA exper)
(SHOCK exper)

MUNKACSI, Zoltan, okleveles banyamérnök

Analysis of technical accidents at drilling. Bány lap 94
no.2:129-135 F '61.

1. Koolajipari Troszt Föszstalya, Budapest.

MUNKACSI, Zoltan, okl. banyamernok

Fishing for broken and stuck drill pipes. Bany lap 94 no.3:207-213
Mr '61.

1. Koolajipari Troszt, Furasi Focsztaly, Budapest.

(Petroleum industry and trade)

MUNKACSI, Zoltan, okl. banyamernok

Fishing for bits casing pipes and other tools fallen into the drill
hole. Bony lap 94 no.4:267-274 Ap '61.

1. Orszagos Koolaj- es Gasipari Troszt Furasi Fosszataly, Budapest.

(Mining engineering)

MUNKACSY, Nandor

Use of tower cranes in the Hungarian construction industry. Magy ipar 10 no.12:564-570 D '61.

MUN'KIN, D.

By the efforts of the whole group. Prom.koop. 14
no.7:34 J1 '60. (MIRE 13:8)

1. Zamestitel' predsedatelya pravleniya Vitebskogo oblpromsoveta,
g.Vitebsk. (Vitebsk—Weaving)

1. V. MUN'KIN
2. USSR (600)
4. AMANGEL'DY DISTRICT - Horse Breeding
7. Horse-breeding section of the Chkalov Collective Farm in the Amangel'dy District of Kustanay Province. Konevodstvo 22 no. 12. 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

USSR/Chemistry - Control appliances
MUNKIN, V.B. FD-1552
Card 1/1 : Pub. 50-9/25

Authors : Anisimov, S. A., Mun'kin, V. B.

Title : Regulation over a distance of the operation of an appliance for the automatic control of the supply of a reagent in such a manner that the duration of the cycle is regulated continuously

Periodical : Khim. prom., No 8, pp 488-90 (40-42), Dec 1954

Abstract : The design and operation of an automatic control appliance for the regulation of the supply of liquid reagents in the production of color motion picture film positives are discussed. Two figures.

Institution : Laboratory of Automatic Control Procedures, NIKFI (Scientific Research Cine-Photo Institute)

Submitted :

M. K., V.B.
ANISIMOV, S.A.; MUN'KIM, V.B.

Remote control for a flow regulator with stepless control of the duration
of the cycle. Khim.prom. no.8:488-490 '55. (MLRA 8:7)

1. Meuchno-issledovatel'skiy kinofotoinstitut
(Remote control) (Flowmeters) (Photography--Developing and
Developers)

SOKOLOV, Sergey Aleksandrovich; MUN'KIN, Veniamin Borisovich;
BOGATOVA, V.S., red.

[Equipment and systems for the remote control of lighting
by operator stations] Apparaty i sistemy telemekhaniziro-
vannogo upravleniya operatorskim osveshcheniem. Moskva,
Iskusstvo, 1965. 234 p. (MIRA 18:7)

MUN'KO, N. P.

23553. O RABOTE FUNKAMENTA I DVIGATELYa TEPLOVZa SERII
E-EL. SISTEMIK NAUCH. TRUDOV (TASHk. IN*T INZHENEROV
Zh.-D. TRANSPORTA), VYP. 2, 1949, C. 75-86

SO: LETOPIS NO. 31, 1949.

14(9)

SOV/95-59-4-10/12

AUTHOR: Mun'ko, N.P., Engineer

TITLE: Gas Pipeline Construction in Uzbekistan (Stroitel'stvo gazo-provodov v Uzbekistane)

PERIODICAL: Stroitel'stvo truboprovodov, 1959, Nr 4, pp 26-29, (USSR)

ABSTRACT: In accordance with the 7-Year Plan annual natural gas production will be brought up to 18.3 billion m³ by 1959, or 106 times the production of 1958. The Bukhara-Khiva gas deposits rank among the richest in the USSR and account for projects covering 6,000km of pipelines and the gasification of 31 cities in Uzbek SSR. If in 1958 the relationship of fuel consumption between gas and coal was 3.5% gas versus 76% coal, the situation will find itself reversed in 1965 with 60% gas and 22.8% coal. Great sums will be saved in coal transport over a distance of over 1000 km. Production of electric energy will be increased 2.4 times by the establishment of 2 new thermal power stations operating on natural gas. Development of the gas industry will in turn lead to a rapid development of the chemical industry, including production of fertilizers, needed for the cotton fields. To

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Gas Pipeline Construction in Uzbekistan

SOW/95-59-4-10/12

facilitate pipe laying a water main is being constructed leading from the Amu-Darya river to Gazli, the center of the gas fields; a number of highways are also under construction. Pipeline Khadzhi-Abad-Fergana delivering gas to Kuva and Fergana is ready for operation; Samarkand and Kokar' are next on the list of cities to be gasified. There is one map.

Card 2/2

MUN'KO, N.

Particular characteristics of the planning of gas pipelines in
Central Asia. Gas. prom. 4 no. 40-41 Ap '59. (MIRA 12:6)
(Soviet Central Asia—Gas, Natural—Pipelines)

MUN'KO, N.P., inzh.

Unsolved problems of the construction of the Gazli-Ural gas pipeline.
Stroi.turboprov. 5 no.6:10-11 Je '60. (MIRA 13:7)
(Gas, Natural--Pipelines)

MUN'KO, N.P.

Gas supply and distribution in Uzbekistan. Gas. prom. 6
no. 1:39-41 '61. (MIRA 14:1)
(Uzbekistan—Gas distribution)

MUN'KO, N.P.; KALLAGOV, A.I., spets. red.; YAKOVENKO, Ye.P.,
red.; SALAKHUTDINOVA, A., tekhn. red.

[Gas industry of Uzbekistan] Gazovaia promyshlennost'
Uzbekistana. Tashkent, Gos.izd-vo UzSSSR, 1963. 229 p.
(MIRA 16:7)

(Uzbekistan--Gas industry)

MUN'KO, T.; PLUZHNIK, A.

Centers of technical progress. Sov. profsoiuzy 16 no.18:39 S '60.
(MIRA 13:10)
(Factory libraries)

DEKHTYAR, B.; FISHER, L. ; UDATOV, A. (g.Mogocha, Chitinskoy obl.);
TOLETIY, P. (g. Yagotin, Kiyevskaya obl.); SOLODOVNIKOV, I.
(Primorskiy kray); MUN'KO.T. (g. Zaporozh'ye)

Letters and correspondence. Sov.profsoiuzy 17 no.22:42-44 N
'61. (MIRA 14:10)

1. Spetsial'nyy korrespondent zhurnala "Sovetskiye profsoyuzy".
(Community centers, Mobile)
(Ural Mountain region—Callisthenics)
(Adult education)

MUNKOV, P.

Organization of the field camps. p. 24.

ARMEISKI PREGLED. (Ministerstvo na narodnata obrana) Sofia, Bulgaria
Vol. 5, no. 6, 1958.

Monthly List of East European Accessions (EEAL) LC, Vol. 9, No. 2, Feb. 1960.
UNCL

MENSCHIK, Z.; MUNKOWNA, K.; ROGALSKI, T.; RYMASZEWSKI, O.; SZCZESNIAK, T.

Role of vitamin E in the organism. Vol. morph., Warsz. 3 no.2:107-
116 Apr-June 1952. (CML 23:4)

I. Of the Institute of Anatomy (Head--Prof. T. Rogalski, M.D.) of
Krakow Medical Academy.

MUNKUYEV, N. Ts.

Dissertation defended for the degree of Candidate of Historical Sciences
at the Institute of Ethnography imeni N. N. Maklukho-Maklay

"Several Important Chinese Sources in the History of Mongolia During the
XIII Century (Translations and Studies)."

Vestnik Akad. Nauk, No 4, 1963, pp 119-145

MUNNICH, D.; GAJDICS, G.

Results with theromycin therapy of typhoid. Orv. hetil. 94 no. 47:1306-
1307 22 Nov 1953. (CLML 25:5)

1. Doctors.

MUNNICH, Denes, dr.

On the prevention of relapse in threomycin-treated typhoid fever,
with special reference to the peripheral blood picture. Orv. 95
no. 34:938-940 22 Aug 54.

I. A degreceni Varosi Tanacs Korhaza (igazgato: Muranyi Klara dr.)
fertozo osztalyanak (foorvos: Aberle Lajos dr.) keslemenye

(TYPHOID FEVER, therapy

threomycin, relapses & eff. on blood picture)

(CHLORAMPHENICOL, derivatives

threo form, ther. of typhoid, relapses & eff. on blood
picture)

MUNNICH, Denes, dr.

Recurrency in chloramphenicol treated typhoid fever; report on a case with three relapses. Orv. hetil. 97 no. 38:1057-1060 16 Sept 56.

I., A Debreceni, Hajdu-Bihar megyei Tanacs Korhaza (igazgato-
foorvos: Varkonyi, Pal, dr., o. v. foorvos: Munnich, Denes, dr.)
Fertoso Osztalyanak koslemeanya.

(TYPHOID FEVER

recurrent, responsible factors & role of chloramphenicol
ther. (Hun))

(CHLORAMPHENICOL, ther. use
typhoid fever, role in recurrence (Hun))

MUNNICH D

EXERPTA MEDICA Sec 4 Vol 13/6 Med. Micro. June 60

2014. CHANGE OF THE WIDAL TITRE VALUES IN TYPHOID FEVER PATIENTS TREATED WITH CHLORAMPHENICOL, WITH SPECIAL REFERENCE TO THE PRECEDING VACCINATIONS AND THE PROGNOSIS - Chloramphenicollal kezelt hastyphusos betegek widal titerérték változásai, különbs tekintettel az előzetes védőoltásokra és a prognosira - Munnich D. and Lakatos M. A Debreceni H.B.M.T. Kórháza, Fertőző Osztály és H.B.M. Köjjelának Közl. - ORV. HETIL. 1959, 100/19 (684-688) Graphu 9
Widal reactions were carried out in 130 cases before, during and after chloramphenicol therapy. The majority of cases showed, during chloramphenicol therapy, only a change of the titre within one dilution unit, both in respect of H and O antibodies. When chloramphenicol therapy was started early, a negative Widal reaction was constantly obtained. (L. 4, 6)

PAP, Zoltan, dr.; MUNNICH, Denes, dr.

Ornithosis causing polyneuritis and nerve paralysis. Ideggyogj. szemle
14 no.9:259-265 S '61.

1. A Hajdu-Bihar Megyei Tanacs Korhaza (Igazgato: Manyi Géza dr.)
ideg- és elmeosztalyanak és fertőzö osztalyanak kozlemenye. (Foervös:
Pap Zoltan dr. és Munnich Denes dr.)

(ORNITHOSIS compl) (POLYNEURITIS etiol)
(MEDIAN NERVE diseases) (RADIAL NERVE diseases)

HUNGARY

MUNNICH, Denes, Dr; LAKATOS, Maria, Dr; Hajdu-Bihar Megye Council Hospital, Infectious Ward (chief physician: MUNNICH, Denes, Dr) (Hajdu-Bihar Megyei Tanacs Kothaz, Fertozo Osztaly), Debrecen, and Hajdu-Bihar Megye Public Health and Epidemiological Station, Laboratory (chief physician: LAKATOS, Maria, Dr) (Hajdu-Bihar Megyei KOJAL -- Kozegeszsegugyi Jarvanyugyi Allomas --, Laboratorium).

"New Data on 'Leptospirosis East of the Tisza River'."

Budapest, Orvosi Hetilap, Vol 108, No 10, 5 Mar 67, pages 459-463.

Abstract: [Authors' Hungarian summary] Over a 7 year period (1957-63), 140 patients were treated for leptospirosis at the ward. More detailed examinations were carried out in 73 of the cases, in 83 per cent of which the tentative diagnosis was confirmed by the leptospira-agglutination-lysis reactions as well. The data indicate that this is an essentially occupational disease. Antibodies belonging to the pomona serotype could be demonstrated most frequently (60 per cent) in the serum of the patients. These cases ran their course in form of a benign serous meningitis. The most severe and severe forms of the disease were caused by sejro, pomona + sejro, and pomona + canicola + icterohaemorrhagia + sejro as well as by canicola serotypes of infection. Jaundice, presumably cholestatic hepatitis occurred in 10 cases, acute interstitial nephritis (nephrosis) in 16 cases, 3 of which led to anuria. The penicillin G therapy applied could be called effective although the second wave of fever could not be prevented by it in several of the cases and,

1/2

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CIA-RDP86-00513R001135610009-5"

L 23952-66 EWT(d)/EWT(m)/EWP(v)/T/EWP(k)/EWP(h)/EWP(1) DJ

ACC NR: AP6009819

SOURCE CODE: UR/0413/66/000/004/0008/0009

AUTHOR: Mun'oz, M. V.; Filatov, A. S.; Romanchikov, B. F.; Zaytsev, A. P.; •37
13
Privedentsev, V. P.

ORG: none

TITLE: An electrohydraulic system for automatically controlling strip thickness on cold rolling mills. Class 7, No 176773 14

SOURCE: Izobreteniya, promyshlennyye obraztsoy, tovarnyye znaki, no. 4, 1986, 6-9

TOPIC TAGS: industrial automation, hydraulic equipment, cold rolling

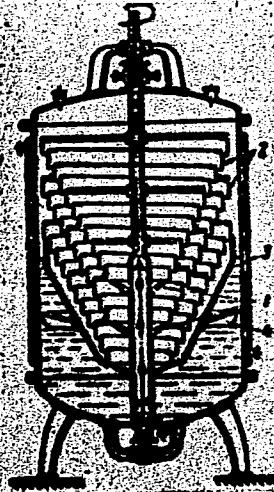
ABSTRACT: This Author's Certificate introduces: 1. An electrohydraulic system for automatically controlling strip thickness on cold rolling mills. The device is operated by signals from a thickness meter. The quality of thickness control is improved by using a discrete system for automatic control of a hydraulic pressure device. This control system consists of a step-servo power motor, a circuit for controlling this motor and a regulator which has a zone of insensitivity with boundaries which are automatically changed by an amount equal to the motion of the pressure device and by a time interval equal to the transportation and measurement delay of the system. 2. A modification of this electrohydraulic system in which the speed is increased and the need for using roller position indicators is eliminated. The hydraulic pressure device

UDC: 621.771.237.016-523.3

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L-3952-66

ACC NR: AP6009819



1--actuating cylinder; 2--control valve;
3--feedback lever; 4--master screw; 5--
step-servo motor; 6--thickness gauge; 7--
hydraulic pressure device; 8--step-servo
motor; 9--control circuit for the step-servo
motor; 100--regulator; a--generators; b--
phase-sensitive power amplifier; c--unit for
selecting the zone of insensitivity; d--
code-to-voltage converter; e--divider;
f--master unit

consists of an actuating cylinder for set-
ting the roller span, a control valve with
lever-controlled motion feedback and a master
screw which is moved by the step-servo motor to control the roller span.

SUB CODE: 10/ DRAWN DATE: 20 Feb 64/ ORIG REF: 000/ OTM REF: 000

Card 2/2

MUNSHUKOV, D.A.

Hydraulic analogy in nonstationary motion of liquids and gases.
Inv. vys. ucheb. zav.; av. tekhn. no.2:20-28 '58. (MIRA 11:6)
1. Khar'kovskiy aviationsionnyy institut, Kafedra lopastnykh mashin
i prikladnoy gasovoy dinamiki.
(Fluid dynamics)

MUNSHUKOV, D.A.

Hydraulic analogy at k>l. Izv.vys.ucheb.zav.; av.tekh. 2
no.3:9-12 '59. (MIRA 12:12)

1. Khar'kovskiy aviationsionnyy institut. Kafedra lopastnykh
mashin i prikladnoy gasovoy dinamiki..
(Fluid dynamics)

MUNSHI TUROK. D.A.

4/207/29/000/0A/0A/0A
B93/835

Author: Solntsev, V.F.

Title: The Scientific-Technical Conference at Khar'kov
Aviation Institute

Periodical, Issued by Uchashchaya avyazhnaya svedeniya, Aviatsionnaya
tsemia, 1959, N^o 6, pp 161-165 (USSR)

Abstract: In May 1959, the 16th Conference of Professional and
Teaching Staff took place.

Strength of Aircraft Section.
On the Theory of Bending of Thin-Walled Columns by
Beams. Candidate of Technical Sciences L.P. Vinogradov.
Card 2/11 The Simulation of Static Experiments on Thin-Walled

Structures by Candidate of Technical Sciences
S.N. Slobodchikov and Senior Instructor V.K. Zolotukhin:
The Bending of Beams Fraying and Opening. by
Candidate of Technical Sciences L.A. Kolosnikov:
The Resistance of the Rigidity of Ribs and Beams on
their Bending by Assistant N.M. Shulzhev. The
Calculation of the Bending of Rectangular Plates by
the Discrete Method by Assistant Yu.P. Pastorev:
The Calculation of Cylindrical Shells by the Method
of Bimetallic Variables by Assistant M.I. Gurvits:
Fillet Construction Technology Section.
The Choice of a Hydraulics Servo-System
for the Automation of Welding Processes by Assistant
V.A. Shabalin. "An Investigation of the Process of
Polishing by an Abrasive Belt by Senior Instructor
Candidate of Technical Sciences V.M. Yermakov:
Investigation of the Operation of a Pneumatic
Hydraulic Plant by Assistant V.L. Lebedev.

4/208/30/000/0A/0A/0A
Card 6/11 A Static Analysis and Calculation of the Accuracy of
the Technological Processes of Machining by
Candidate of Technical Sciences G.P. Kanchik:
The Automatic Welding of Long Panels by
Candidate of Technical Sciences I.Ye. Kanchik:
The Spreadings of the Experience of
Innovators and the Classification of Organizational-
Technical Measures in Machine Constructions by
Senior Instructor M.M. Abramovich. "Features of
Measurable Abrasion of a Cutting Tool in Pipe Sharpening"
by Assistant V.M. Malikhov. "An Investigation of the
Process of Compression at High Velocities of
Deformation" by Doctor Candidate of Technical Sciences
A.R. Baran. "The Standardization of Vibrational
on the Human Organism in Aircraft Production" by Senior
Instructor V.D. Ivanov,
Theory and Construction of Aircraft Engines and
Propeller-Driven Machines Section. The Investigation

of the Flow Between the Inlet and Outlet Valves of a
Turbine by Instructor Candidate of Technical Sciences
S.N. Tarshov. "The Variation in the Stage Parameters of
an Axial Compressor in Accordance with the Size of the
Radial Clearance" by Assistant A.M. Anan'yan. "On the
Problem of Non-Stationary Heat Transfer by Assistant
A.D. Prokhorov. "The Influence of an Electric Field on
the Flame of a Burner" by Senior Engineer E.P. Kostenko:
"Calculation of Temperature Compensation of
Capacitive Pressure Pick-Up" by Assistant L.Ya. Astaf'eva:
Aerohydrodynamic Section.
Ideal Imparabolic Flows Around a Body" by Assistant
V.V. Khokhlov. "The Control of the Boundary Layer" or a
Ring by Perforation of the Leading Edge" by Assistant
I.S. Vinogradov. "The Gas-Hydraulic Analogy and its
Applications" by Senior Instructor D.P. Smirnov:
"The Aerodynamic Investigation of Small Propellers" for
Small Reynolds Number" by Ensign N.I. Ulyanov.

4/209/31/000/0A/0A/0A
Card 7/11

10.6300

S/147/60/000/003/003/018
E022/E420AUTHOR: Munshukov, D.A.TITLE: An Approximate Analysis of Wing Flutter by Means of
a Hydraulic AnalogyPERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Aviatsionnaya
tekhnika, 1960, No.3, pp.16-21

TEXT: Since there is a similarity between unstable isentropic gas flow in two dimensions and shallow-water flow in an open channel, the latter may be employed to investigate the flutter of a wing section by means of a model in a hydraulic tank. As shown in Ref.4, if the wing has a large aspect ratio it may be replaced by an equivalent two-dimensional aerofoil whose geometry and inertia is the same as the corresponding values at $3/4$ of the span of the actual wing. The most severe flutter occurs when the aerofoil suffers simultaneous bending and torsional vibration; as shown in Fig.3, where K is the centre of rotation, a distance of q from the centre of gravity. The aerodynamic properties of the profile as expressed by the lift P_y and the moment M_k (with respect to centre of rotation K) are given by Eq.(1) and (2), the meaning of the symbols being explained in Fig.1 (and k in these formulae

✓ C

Card 1/3

S/147/60/000/003/003/018
E022/E420

An Approximate Analysis of Wing Flutter by Means of a Hydraulic Analogy

being the adiabatic exponent). The corresponding characteristics of the model in the hydraulic tank are given by Eq.(3) and (4). Thus with the geometric and kinematic similarity secured in both cases, the two motions will be equivalent if the conditions of Eq.(5) and (6) are satisfied, i.e. the hydraulic analogy is secured as well, giving the true ratio of the transverse and rotational frequencies of oscillations $w_y:w_a = w_y^i:w_a^i$. Next the equations of motion are considered for the equivalent two-dimensional Equations (8) and (9) (where \bar{m} is the mass of the profile per unit length, \bar{I}_{am} is the moment of inertia with respect to the centre of rotation K , α_0 is the angle of incidence corresponding to zero moment of the elastic forces and \bar{R}_a is the dimensionless radius of gyration) and for the model in the hydraulic tank, Eq.(10) and (11). Again to secure the equivalence of the results, the relations of Eq.(12) and (13) must be satisfied. The requirements of Eq.(5), (6) and (12) may be obtained by a suitable choice of the elastic supports and by appropriate mass distribution in the model, as well as by varying

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S/147/60/000/003/003/018
E022/E420

An Approximate Analysis of Wing Flutter by Means of a Hydraulic Analogy

the depth of the water flow in the tank. In conclusion it is stated that, in practice, the analogy cannot be secured for the cases when

$$\frac{\bar{m}}{\rho_{\infty} b^2}, \frac{a_{\infty}}{b \omega_y}, \frac{a_{\infty}}{b \omega_a}$$
 are of large magnitude.

There are 4 figures and 5 Soviet references (2 of them translations into Russian).

ASSOCIATION: Khar'kovskiy aviatsionnyy institut Kafedra lopastnykh mashin i prikladnoy gazovoy dinamiki (Khar'kov Aviation Institute, Chair of Bladed Engines and Applied Gasdynamics)

SUBMITTED: January 21, 1960

VC

Card 3/3

MUNSHTUKOV, D. A., Cand Tech Sci -- "Study of gas-hydraulic analogy and its applications." Khar'kov, 1961. (Min of Higher and Sec Spec Ed UkrSSR. Khar'kov Polytech Inst im V. I. Lenin) (KL, 8-61, 246)

- 274 -

S/147/61/000/004/006/021
E025/E120

10.1200

AUTHOR: Munshukov, D.A.

TITLE: The gashydraulic similarity of plane and axially symmetrical flows

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy,
Aviatsionnaya tekhnika, no.4, 1961, 39-44

TEXT: Steady motion in a gravity field of an open flow of a liquid along a surface somewhat differing from the horizontal plane is considered. It is assumed that viscosity and surface tension are absent and the vertical acceleration is small: the equations of conservation of momentum and mass are written down for this case and transformed into dimensionless coordinates. Also considered is the plane flow of a non-viscous gas with an external potential field of force and an inflow of heat. The differential equations for the conservation of momentum and mass are given for this case. It is assumed that the specific heat of the gas at constant volume is a constant and that the adiabatic index does not depend on the temperature T or on the other parameters and that a given equation of state is satisfied.

Card 1/4

The gashydraulic similarity of ...

S/147/61/000/004/006/021
E025/E120

An equation is given connecting the pressure, density and entropy. This is reduced to dimensionless form. The equations for liquid flow and for the gas flow are then compared and equations derived which must be satisfied for similarity of the two flows. The conditions for similarity can be satisfied if the surface of the hydraulic channel is profiled in accordance with a given condition. The coordinates of the surface of the hydraulic channel are calculated from a fixed horizontal plane and given in dimensionless form and it is shown that in principle it is possible to form, in a hydraulic channel, plane flows of a non-viscous gas with inflow of heat and mechanical energy when the physical properties of the gas are preserved. The relations between the parameters of the two systems when the boundary conditions are identical are given and also the relations between the Mayevskiy and Froude numbers. In particular, when the adiabatic index $k = 2$ and the entropy is a constant the condition for profiling of the bed of the hydraulic channel is given in a simpler form and the modelling of the motion of the gas is extremely simple. The shape of the surface of the hydraulic channel has to correspond only to the

Card 2/ 4

The gashydraulic similarity of ...

S/147/61/000/004/006/021
E025/E120

potential energy of the mass. The profiling is also given for $k \neq 1$ and constant entropy. In distinction from the preceding case the shape of the bed of the hydraulic channel now depends on the depth of liquid and hence in experiments a method of successive approximation must be sought. In the general case of the motion of a gas with variable entropy and $k \neq 2$ the direct practical use of a hydraulic channel for modelling the motion of a gas is difficult since the entropy is an unknown function of the coordinates. However, having in the hydraulic channel a definite flow of fluid, it is comparatively simple to obtain the corresponding flow of the gas and the index of its entropy distribution. An equation is given for the quantity of heat imparted to the gas in unit time and this makes it possible to determine the properties of the plane motion of a gas with variable entropy from the results of an investigation into the flow of a liquid. Finally the isentropic axially symmetrical flow of a gas is compared with the plane open flow of a liquid. The differential equations of the conservation of momentum and mass are given for an axially symmetrical flow of a gas in a

Card 3/4

The gashydraulic similarity of ... S/147/61/000/004/006/021
 E025/E120

cylindrical system of coordinates when external forces are absent, all the quantities being given in dimensionless form. The equations assume a simpler form if the shape of the profile of the bed of the hydraulic channel is suitably chosen. There are 2 figures.

ASSOCIATION: Khar'kov aviatsionnyy institut, Kafedra gazotermodynamiki i reaktivnykh dvigateley
(Khar'kov Aviation Institute. Department of
Gasthermodynamics and Jet Engines)

SUBMITTED: December 27, 1960

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Card 4/4

Munshukov, D.A.

AID Nr. 966-9 14 May
SUPERSONIC DIFFUSOR PERFORMANCE SIMULATION (USSR)

Munshukov, D. A. Izvestiya vysshikh uchebnykh zavedeniy. Aviatsionnaya
tekhnika, no. 1, 1963, 20-25. S/147/63/000/001/003/020

A simple apparatus is described for qualitative simulation of the gas flow conditions in a supersonic inlet with Mach numbers up to 10 and adiabatic index $k = 2$. The apparatus is based on the gas-hydraulic analogy, uses water as a working fluid, and has a test section 912 x 418 mm in size. It makes possible visual observation of shock formation. Continuous flow is maintained in the test section by a pump provided with special ejectors, and the range of M is achieved by proper regulation (1 to 3 mm range) of the water level. The apparatus was used for testing two models representing processes in a ramjet engine, i. e., the operation of a diffusor with oblique shock waves and a flow of gas near to ideal. The shape of the models was determined according to the condition that the velocity field and the depth field of the open channel flow are similar to the velocity field and density of a two-dimensional flow of gas with $k = 2$. The effect of engine operating conditions on the gas flow in

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AID Nr. 966-9 14 May

SUPersonic DIFFUSOR [Cont'd]

8/147/63/000/001/003/020

a diffusor and, in particular, the effect of heat addition in a combustion chamber was simulated by changing the throat area of the Laval nozzle. Test observations showed that the required flow regime could be obtained for a diffusor with oblique shock. However, in the case of an isoentropic diffusor a strong shock wave is formed in the front. The required regime for the second case can be obtained by increasing the throat area of the Laval nozzle to generate a second hydraulic shock which coincides with the first, and then reducing the nozzle and diffusor throat areas to the initial values. No numerical data were obtained during tests. [AC]

Card 2/2

L 40607-66 FWT(d)/FWT(l)/EMF(m)/FWC(n)/EMC(s) T-8

ACC NR: AP6010268 (A) SOURCE CODE: UR/0145/66/000/001/0107/0112

AUTHOR: Munshtukov, D. A.; Nechitaylo, K. F. (Engineer); Potapenko, A. Ye (Engineer)

ORG: None

TITLE: The similarity of nonstationary gas flow in exhaust systems of two-stroke engines

SOURCE: IVUZ. Mashinostroyeniye, no. 1, 1966, 107-112

TOPIC TAGS: exhaust gas dynamics, engine exhaust system, exhaust gas removal system, gas flow

ABSTRACT: Experimental investigations of the most important similarity criteria for the modeling of gas-dynamical processes in exhaust systems of two-stroke engines are presented. Following the presentation of the original criteria and similarity parameters, the authors describe the experimental setup, the operating principles of the modeling device, and the experimental methodology. The experimental results showing the influence of the various criteria indicate, among others, that there exists a region of partial self-similar flow of the gas. The paper was presented by A. I. Borisenko, Professor of the

Card 1/2

UDC: 621.43.06

L 26607-66

ACC NR: AP6010268

Khar'kov Aviation Institute (Khar'kovskiy aviatcionnyy institut), 14 Jul 64. Orig. art.
has: 4 formulas, 4 figures, and 1 table.

SUB CODE: 10 / SUBM DATE: 14Jul64 / ORIG REF: 002

Card 2/2

mjs

ACCESSION NR: AT4042319

8/0000/63/003/000/0395/0405

AUTHOR: Munehtukov, D.A.

TITLE: Approximate calculation of a conduction-type magnetohydrodynamic generator using the concept of entropy

SOURCE: Soveshchaniye po teoreticheskoy i prikladnoy magnitnoy gidrodinamike. 3d, Riga, 1962. Voprosy* magnitnoy gidrodinamiki (Problems in magnetic hydrodynamics); doklady* soveshchaniya, v. 3. Riga, Izd-vo AN LatSSR, 1963, 395-405

TOPIC TAGS: hydromagnetics, magnetohydrodynamic generator, entropy, gas flow, conduction generator

ABSTRACT: A brief review dealing with the calculation of linear DC magnetohydrodynamic generators is given, along with a critique, after which the author proposes his own calculation method. The new method is said to expand somewhat the possibilities of a qualitative estimate of the energy conversion processes, since no constraints are imposed on the constancy of any parameter along the length of the flow-through part of the magnetohydrodynamic generator. The calculation is valid for unidimensional stationary motion of the electrically conductive gas when the magnetic Reynolds numbers are small

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ACCESSION NR: AT4042319

and when both heat flows and end effects are absent. A further assumption is that the magnetic permeability and dielectric constant of the gas under consideration approximate the corresponding values of the vacuum and that the gas is governed by the equation for the state of an ideal gas ($P = RT$). The basic parameters with which the author operates are the full temperature T_0 and entropy S . A discussion is given of the full temperature and its variation. The author outlines the considerations which dictated the use of the full temperature (temperature of the braked flow), and shows that, with k and R constant, the variation in the full temperature uniquely determines the useful work performed in the generator by a unit mass of electrically conductive gas. The employment of the entropy concept was determined by other fundamental considerations. If thermal flows are not present, the entropy can change only as the result of the irreversibility of the energy conversion processes. A more intensive increase in entropy always indicates a higher degree of energy dissipation. Thus, in its character as one of the parameters of the gas flow, entropy permits a simultaneous quantitative estimation of the irreversibility of the energy conversion processes in the working section of the magnetohydrodynamic generator. Involved in the author's discussion of entropy is the π -theorem of

Card

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ACCESSION NR: AT4042319

the theory of similitude and dimensionality. In the actual numerical calculation, the following parameters are assumed to be known: the flow of the mass M , the geometry of the flow part of the mhd-generator, the variation of the inductance of the external magnetic field B over the length of the generator and the dependence of the electrical conductivity σ on the parameters of the gas. The calculation reduces itself to the determination of the following values: 1. the EMF of the induction in the i -th section of the flow part of the generator

$$\epsilon_i = B_i w_i; \quad (1)$$

2. the change in full temperature in the transition from the i -th section to the $(i + 1)$ section, located near the i -th section

$$\Delta T_{ei} = -\frac{k_i - 1}{k_i R_i} \cdot \frac{\sigma k_i B_i}{M} (\epsilon_i - U) w_i A x_i; \quad (2)$$

3. the full temperature in the $(i + 1)$ section

(3)

$$T_{ei+1} = T_{ei} + \Delta T_{ei};$$

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Card

ACCESSION NR: AT4042319

4. the change in entropy in the i-th section

$$\Delta S_i = \left[\frac{(c_i - U)^2 \sigma h_i}{4M} + \zeta \frac{w_i^2}{2} \cdot \frac{1}{D_w} \right] \frac{\Delta x_i}{T_i}; \quad (4)$$

5. the change in the full pressure

$$\frac{\Delta p_{oi}}{p_{oi}} = \frac{k_i}{k_i - 1} \cdot \frac{\Delta T_{oi}}{T_{oi}} - \frac{\Delta S_i}{R_i}; \quad (5)$$

6. the full pressure in the (i + 1) section

$$p_{oi+1} = p_{oi} + \Delta p_{oi}; \quad (6)$$

7. the value λ_{i+1} and the actual parameters of the gas in the (i + 1) section

Orig. art. has: 4 figures and 28 form.....

$$p_{oi+1} = p_{oi+1} \pi(\lambda_{i+1}); \quad T_{oi+1} = T_{oi+1} \pi(\lambda_{i+1}), \quad (7)$$

ASSOCIATION: none

SUBMITTED: 04Dec63

ENCL: 00

SUB CODE: ME, TD

NO REF SOV: 004

OTHER: 003

4/4

Card

MUNSTER, W., ing. [deceased]

Methods and practical directions on crepon production. Ind
text Rum 12 no.8:330-333 Ag'61.

MUNSTEROVA, E.

MUNSTEROVA, E. Surface hardening of spheroidal cast iron after high-frequency heating. p. 323. Vol. 4, No. 11, Nov. 1956.
SLEVARENSTVI. Praha, Czechoslovakia.

SOURCE: EAST EUROPEAN ACCESSIONS LIST (EEAL) VOL 6 NO. 4 APRIL 1957

MUNTANIOLOV, N. I.

MUNTANIOLOV, N. I.: "Sterility in cows of the Kurgan variety and measures to liquidate it". Kurgan, 1955. Min Higher Education USSR. Kazan' State Veterinary Inst imeni N. E. Bauman. (Dissertations for the Degree of Candidate of Agricultural Sciences)

SO: Knizhnaya letopis', No. 52, 24 December, 1955. Moscow.

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Fibers from solutions of low-substituted xanthogenates. Zhur.prikl.
khim. 30 no.12:1815-1820 D '57. (MIRA 11:1)
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Muntean, I. [Muntean, I.]

Calculating method for electric circuits. Rev math pures 8
no.1:117-137 '63.

MUNTEAN, Ion

Contributions to solving synthesis problem of diagrams
with contacts and relays. Pt. 1. Studii cerc mat 15 no. 4;
477-497 '64.

MUNTEAN, V. Cindea

Degassing kinetics of coal. Rev Roum metalurg 8 no. 2:229-241
'63.

CUREA, I.; MIHAILESCU, Dtr.; TORO, E.; CUREA, O., prof.; BERCEI, E.;
GHEREGA, O.; JURA, C., conf.; OHANOVICI, N.; SINITEANU, D., asist.;
LAMOTH, P., conf.; POLICEC, A., asist.; MARIENUT, U., asist.;
STURZ, I.; OITA, V.; BAEA, R.; MUNTEANU, A.; SCHIFF, A., asist.

Total solar eclipse of February 15, 1961. Studii ~~astron~~ seismol 7
no.2:247-258 '62.

1. Membru al Comitetului de redactie, "Studii si cercetari de astronomie
si seismologie" (for I. Curea). 2. Studenti la Institutul Pedagogic
Timisoara (for Bercei and Gherega).

MUNTEANU, A. - APOSTOL, A. - MACOTA, T.

New attempts to reduce the volume of masory work in small gravity dams used for torrent training. p. 540

REVISTA PADURILOR. (Asociata Stiintifica a Inginerilor si Technicienilor din Romania si Ministerul Agriculturii si Silviculturii) Bucuresti, Rumania. Vol. 73, no. 9, Sept. 1958

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MUNTEANU, AL.; WEINER, L.

Studies on the purification of waste waters from the leather industry.
Hidrotehnica 8 no.2:48-53 F '63.

MUNTEANU, Ala, ing.; MARIN, Constantin, ing.; STANESCU, Eugen, ing., candidat
in stiinte tehnice.

Aspects of the compaction technology of the earth dams in Rumania.
Hidroteh apele meteor 9 no.2:62-66, F '64.

MUNTEANU, Augustin; IORDACHE, Ion

Continuous improvement of the technical and material supplying.
Probleme econ 16 no.2:156-157 F '63.

1. Director, Fabrica de conserve de legume si fructe "11 Iunie"-Dej
(for Munteanu). 2. Director, Intreprinderea Industrială de Stat
"Prutul"-Galati (for Iordache).

WEINER, L.; MUNTEANU, A.; IANCU, A.

Research on the purification of waste waters from the dyeing
industry and intermediary products obtained in dye fabrication.
Studii prot epur apeler 5:161-194 '64.

MUNTEANU, A.; CISMAN, A.

Electromotive force of polarization of very thin diamagnetic layers.
In French. p. 5.

REVUE DE PHYSIQUE. JOURNAL OF PHYSICS. (Academia Republicii Populare Romane)
Bucuresti, Romania. Vol. 3, no. 1, 1958.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 7, July 1959.

Uncl.

RUMANIA/Atomic and Molecular Physics - Low Temperature Physics

D

Abs Jour : Ref Zhur - Fizika, No 12, 1959, 27221

Author : Munteanu, A.

Inst : ~~Institute~~

Title : Physics of Low Temperatures. Liquid Helium

Orig Pub : Gaz. mat. si fiz., 1958, Al0, N 12, 713-730

Abstract : Popular article.

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Muntyanu, A. P.

81819

S/129/60/000/07/003/013
E193/E235

187400

AUTHORS: Rotenshteyn, B. F., and Muntyanu, A. P.TITLE: The Effect of Heat Treatment on the Internal Stresses in
Ferromagnetic LayersPERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov,
1960, No. 7, pp. 15-16

TEXT: It has been established by other workers (Ref. 1) that the fatigue strength of metals can be increased by coating them with another, electro-deposited metal, nickel being particularly suitable for this purpose owing to the low magnitude of internal stresses in electro-deposited layers of this metal. The object of the present investigation was to study the effect of heat treatment at 150 to 250°C on the magnitude of the internal stresses in layers of nickel and nickel-iron alloy of various thickness, electro-deposited on copper. To determine the internal stresses a method was used which is based on the magneto-mechanical effect of ferromagnetics, namely that in the case of magnetization in a longitudinal a.c. field there will be a maximum in the internal friction for a magnetic field of a certain value. The results indicate that the magnitude of the

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81819

S/129/60/000/07/003/013
E193/E235

The Effect of Heat Treatment on the Internal Stresses in Ferromagnetic Layers

internal stress present in electro-deposited ferromagnetic layers can be reduced by heating, the optimum temperature of the heat treatment depending on the plating conditions, thickness of the deposit, etc. The increase in the magnitude of internal stresses occurring at temperatures higher than the optimum temperature must be attributed to some physico-chemical processes, taking place during the heat-treatment, since this effect is not observed if the heat treatment is carried out in vacuum. The fact that the onset of the magneto-mechanical effect coincides with intensified evolution of hydrogen, indicates that hydrogen, present in electro-deposited layers, plays an important role in the studied phenomena. There are 3 figures and 5 references: 4 Soviet and 1 English.

ASSOCIATION: Timosharskiy politekhnicheskiy institut (Rumyniya)
(Timisoara Polytechnical Institute (Rumania))

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Card 2/2

ROTHENSTEIN, B.; MUNTEANU, A.

Influence of thermal treatment under natural conditions upon the
internal tensions in ferromagnetic layers. Studii mat Timisoara 7
no.1/2:209-213 Ja-Je '60. (EEAI 10:4)

1. Institutul politehnic Timisoara, Laboratorul de fizica.
(Metals) (Magnetism) (Nickel)
(Naphthalenedisulfonic acid)
(Electrolysis) (Surface tension)

S/129/63/000/001/003/017
E073/E335

AUTHORS: Rotenshteyn, B.F., Muntyanu, A.P. and Shif, A.F.
TITLE: Compound ferromagnetics with high internal friction
PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov,
no. 1, 1963, 12 - 15
TEXT: A method of increasing the internal friction of non-ferromagnetic metals by depositing electrolytically a coating of a ferromagnetic (Ni or an Fe-Ni alloy) is described. Nickel-plating took place in a bath containing 140 g/l. NiSO_4 , 20 g/l. NiCl_2 and 20 g/l. H_3BO_3 . 30 g/l. ammonium sulphate or 4 g/l. dinaphthalene sulphonic acid (2.6-2.7) were added to the solution; hydrogen index 5.2, current density 1 A/cm^2 . Plating with an Fe-Ni alloy was in a bath containing 21.8 g/l. $\text{NiSO}_4 \cdot 6\text{H}_2\text{O}$, 9.7 g/l. NaCl, 25 g/l. H_3BO_3 , 0.83 g/l. saccharin, adding $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$ in the quantity required to obtain an alloy of the desired composition. The internal friction was measured by the torsion-pendulum method with a varying stress-amplitude up to 2.5 kg/mm^2 , applying a DC Card 1/3

Compound ferromagnetics

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E073/E335

longitudinal magnetic field of up to 600 Oe. The specimens were heated to 220 °C after being fitted into the instrument and held for 1 h at that temperature. Results: 1) internal friction is almost independent of amplitude under conditions of saturation-magnetization (600 Oe); 2) there is a definite stress at which the internal friction is highest for each magnitude of the magnetic field; 3) there is an intensity of the longitudinal magnetic field, for each stress value, at which the internal friction will have the highest value and the magnitude of the magnetic field will be the lower the higher the stress-amplitude; 4) the value H_{max} at which the internal friction is highest for a given stress-amplitude depends on the properties of the metal in the core of the specimen; the internal friction of combined ferromagnetics depends to a great extent on the amplitude of the force; also, the dependence is more pronounced in the magnetized than in the demagnetized state. For commercial iron, Fe-Ni alloys with up to 50% Ni and for pure annealed Ni the internal friction in the Ni is highest for an amplitude between 1 and 2 kg/mm²,

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Compound ferromagnetics ...

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$Q^{-1} = 1910 \times 10^{-5}$ for commercial iron and 1590×10^{-5} for nickel.
A compound ferromagnetic with a layer of Fe-Ni alloy has an internal friction comparable with that of an Fe-Ni alloy; holding of such materials in vacuum at high temperatures appears to give them higher internal-friction values than those obtained in the here described work. There are 5 figures.

ASSOCIATION: Timisoarskiy politekhnicheskiy institut (Rumyniya)
(Timisoara Polytechnical Institute, Romania)

Card 3/3

RUMANIA/Cultivated Plants. Potatoes. Vegetables. Melons. M

Abs Jour : Ref Zhur-Biol., No 15, 1958, 68189

Author : Zidaru, Olga; Munteanu, Constantin

Inst : -

Title : Record Tomato Yields.

Orig Pub : Gradina, via si livada, 1957, 6, No 4, 13-21

Abstract : A detailed description of a method of preparing seedlings is given and of the agricultural engineering techniques of growing the Culturate de Tulcea tomato variety, as employed on one of the farms of Braila Oblast' (RPR). From an area of 0.73 hectare, 71.3 tons of tomatoes were gathered, which in terms of one hectare amounts to 92 tons.

Card : 1/1

BOTEZ, M., prof. dr.; MUNTEANU, C., asist. ing.; GHITAU, D., asist. ing.

Electronic calculators and their use in geodetic calculations.
Rev geodezie 6 no.4:19-34 '62.

1. Institutul de constructii Bucuresti, Sectia geodezie (for
Botez, Munteanu, Ghita).

MUNTEANU, Corneliu (Bucuresti); PESTROIU, Daniel (Tirgu Jiu); PIRSAN, Liviu (Bucuresti); VOICULESCU, Dan (Bucuresti); ALEXANDRU, I. (Maramures)
PELTANU, Ioan (Bucuresti); STANCU, I.M. (Bucuresti); CHITIUSCU, Ion (Bucuresti); STANESCU, Ilie (Sibiu); IONESCU, Traian (Braila);
KACSO, F. (Cluj); MANESCU, L. (Rimnicu Vilcea); IONESCU-TIU, C.;
FOCSENEANU, M.I.; POPA, Eugen (Iasi); MIHALCA, Dan (Bucuresti); PELIGRAD
Nicolae, prof. (Pitesti). RENAI, I. Dorin (Constantza); STANCU, Ion M. (Bucuresti).

Proposed problems. Gaz. mat B 16 no.2:86-91 F '65.